Overview of Georgia Tech

Dr. G. Wayne Clough
President

Georgia Power Company
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Georgia Tech: Recognized for excellence

- Among top 10 public universities in the United States
- Among top 5 engineering schools in the United States
- Nationally ranked for computing, architecture, management, and selected science and liberal arts programs.
Students and faculty

- 17,933 students
  - 12,357 undergraduates
  - 5,576 graduate students
- Added 4,150 students in past decade
- Leader in graduating women and minority engineers

- 962 academic faculty
- 961 research faculty
- 208 post-docs
- 117 endowed chairs and professorships
- 2nd in nation in NSF CAREER Awards for outstanding young faculty
Five campuses on three continents

Georgia Tech Atlanta

Georgia Tech Savannah

Georgia Tech Lorraine

Georgia Tech Singapore

Georgia Tech Ireland
At the leading edge

- No. 2 in the nation in engineering R&D
- Top 5 in research volume among universities with no medical school
- 19 National Centers of Excellence, including 3 nanomedicine centers
- Leader in MEMS and microelectronics
Interdisciplinary research thrusts

Energy

Nano-medicine

Systems biology

Electronic health systems
Interdisciplinary research thrusts

High performance computing

Disasters, water

Robotics

Sustainability

1940-1950
Georgia Tech’s economic impact

- $4 billion annual impact on the state of Georgia
- Top 10 university in patents awarded
- No. 3 in Georgia for patents behind GE Energy and Bell South
- Award winning business incubator with facilities in Atlanta, Savannah, Columbus, Warner Robbins and Metz, France
- 1995-2005: created 76 new companies
Brings Georgia Tech’s new and established programs together in an integrated initiative to help entrepreneurs, industries, and communities become more innovative and competitive

Commercialization Services:
- Venture Lab

Entrepreneur Services:
- ATDC

Industry Services

Community Policy and Research Services
Technology Enterprise Park
Reshaping the campus

Biotechnology Complex

Technology Square
intersects

- Georgia Power / GRA Eminent Scholar in Air Quality
- 4 Georgia Power Distinguished Professorships
- $21,000 for scholarships this year
- $18 million in research grants and contracts over the years, including nearly $10 m for NEETRAC
- 146 co-op students over the past 5 years
- 585 alumni employed by Georgia Power; 368 more employed by other Southern Company units
- 68 Georgia Power/Southern Co employees enrolled in Georgia Tech professional education courses
Service on Georgia Tech Advisory Boards

- Tom Fanning, Georgia Tech Advisory Board
- Chuck Huling, Civil & Environmental Eng.
- Louis Long, Mechanical Eng.
- Leslie Sibert, Georgia Tech Research Corp.
- Michael Anderson, Alexander Tharpe Board
NEETRAC: National Electric Energy Testing Research and Applications Center

- Leading edge R&D; state-of-the-art testing
- Developing standards
- Technology transfer
- High-level education programs

Environmental science, engineering

- Research in air, land, water quality
- Industrial ecology
- Instrumentation for environmental quality
- Hazardous and solid waste engineering
Solar energy

University Center of Excellence in Photovoltaics Research and Education

Nuclear energy

- Nuclear engineering program
- New materials for rigors of producing nuclear energy, shielding radiation sources
Fuel cell and battery technologies

- Low-emission vehicles
- Wireless telecommunications
- Distributed stationary power supplies

Center for Organic Photonics and Electronics

- National Center of Excellence
- Develops new materials
- Manipulates photons in light in ways similar to electrons
Strategic Energy Initiative

- Energy technology development, assessment, demonstrations
- Policy guidance based on scientific facts, engineering principles, and economic realities
- Southern Pine to Ethanol initiative
- $12 million partnership with Chevron: biofuels and hydrogen
- Georgia Offshore Wind Project
- GRA Eminent Scholar in Energy
Construction of substation, distribution system about 50% complete.

Station will feature “Power Wrap” with special lighting.

Power on: May 2007
Opportunities

- Technology Enterprise Park: Land expansion
- GRA Energy Chair endowment match
- 2007 renewal of Georgia Power Professorships
  - $200,000 annual renewal
  - $5 million to endow
- Joint research activities: basic ordering agreement
  - Alternative energy
  - Sustainability
  - Technology transfer
- Others?